

Form PTO 1449 (Rev. 2-32)		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. IMMR-0091B (034701-562)		Serial No. 10/671,465	
				Information Disclosure Statement by Applicant			
				Applicant: Alex S. Goldenberg et al. Filed: 09/29/2003 Group: 2629			
(Use several sheets if necessary)							
U.S. Patent Documents							
	Document No.	Date	Name	Class	Subclass	Filing Date	
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Examiner	/Seokyun Moon/			Date Considered	06/20/2008		
Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.							

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	Unknown	
		Filing Date	September 29, 2003	
		First Named Inventor	Alex S. GOLDENBERG	
		Group Art Unit	2673	
		Examiner Name	Unassigned	
2	of	4	Attorney Docket Number	IMMR-073/03US

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁴
		Office ²	Number ³	Kind Code ³ (if known)			
✓ A	B1		0 349 086	A1	Stark Kerast B.V.	01/03/1990	

¹ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

² For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

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		Group Art Unit	2673
		Examiner Name	Unassigned
3 of 4	Attorney Docket Number	IMMR-473/02US	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	C1	Balgiye, "Electric Control Loading - A Low Cost, High Performance Alternative," <i>Proceedings of Interservice/Industry Training Systems Conference</i> , pp. 247-254, November 6-8, 1990	
	C2	Iwata, "Pen-based Haptic Virtual Environment," 0-7803-1363-1/93 IEEE, pp. 287-292, 1993	
	C3	Russo, "The Design and Implementation of a Three Degree of Freedom Force Output Joystick," <i>MIT Libraries Archives</i> pp. 1-131, May 1990, archived 8/14/90	
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Substitute for form 1449A/PTO		Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	Unknown	
		Filing Date	September 29, 2003	
		First Named Inventor	Alex S. GOLDENBERG	
		Group Art Unit	2673	
		Examiner Name	Unassigned	
4	of	4	Attorney Docket Number	IMMR-07302US

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	C2	Rabinowitz et al., "Multidimensional tactile displays: Identification of vibratory intensity, frequency, and contractor area," <i>Journal of The Acoustical Society of America</i> , Vol. 82, No. 4, October 1987	
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<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	C3B	Bejczy et al., "A Laboratory Breadboard System For Dual-Arm Teleoperation," <i>SOAR '89 Workshop, JSC, Houston, TX</i> , July 25-27, 1989	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	C31	Ohkyoung et al., "A Low-Cost Force Feedback Joystick and Its Use in PC Video Games," <i>IEEE Transactions on Consumer Electronics</i> , Vol. 41, No. 3, August 1995	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number.
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Complete If Known

Application Number	10/671,465
Filing Date	September 29, 2003
First Named Inventor	Alex S. Goldenberg
An Unit	2873
Examiner Name	Unassigned
Attorney Docket Number	IMMR-073/02US

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
S.M.		4,795,206	1/3/94	Jai	
		4,731,603	5/15/96	McRae et al.	
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S.M.		Country Code ³ Number ⁴ Kind Code ⁵ (if known)			
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		WO 99/40504	12/8/1999		
		WO 02/27706	4/4/2002		

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Application Number	10/671,465
Filing Date	September 29, 2003
First Named Inventor	Alex S. Goldenberg
An Unit	2673
Examiner Name	Unassigned
Attorney Docket Number	IMMR-073/02US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	✓	PATRICK, "Design, Construction, and Testing of a Fingert Tactile Display for Interaction with Virtual and Remote Environments," <i>Master of Science Thesis, MIT, Aug. 1990, archived Nov. 8, 1990.</i>
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Examiner Signature	/Seokyun Moon/	Date Considered	07/06/2006
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 808. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet **5** of **6**

Complete If Known

Application Number	10/871,465
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First Named Inventor	Alex S. Goldenberg
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Attorney Docket Number	IMMR-073/02US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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✓	1	"Technical Manual Overhaul Instructions With Parts Breakdown, Coastal Control Shaker Part no. C-25502," Safe Flight Instrument Corporation, Revised 15 July 1980 (23 pages).
	✓	SCANNELL, "Taking a Joystick Ride," Computer Currents, Boston Edition, Vol. 9, No. 11, November 1994
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✓	✓	HASSER, C., "Force-Reflecting Anthropomorphic Hand Masters," ALUCF-TR-1996-0110, 1995, pp. 5-31.

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Sheet 6 of 6

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
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Application Number	Unknown
Filing Date	September 29, 2003
First Named Inventor	Alex S. GOLDBERG
Group Art Unit	2673
Examiner Name	Unassigned
Attorney Docket Number	IMMR-073/02US

2 of 4

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁴
		Office ¹	Number ²	Kind Code ³ (if known)			
	B1		0 349 086	A1	Sterk Kwant B.V.	01/03/1990	

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3 of 4

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
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	C12	Gotow et al., "Controlled Impedance Test Apparatus for Studying Human Interpretation of Kinesthetic Feedback," WAI-11-00, pp. 332-337	
	C13	Stanley et al., "Computer Simulation of Interacting Dynamic Mechanical Systems Using Distributed Memory Parallel Processing," DSC-Vol. 42, <i>Advances in Robotics</i> , pp. 55-61, ASME 1992	
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Application Number	Unknown												
Filing Date	September 29, 2003												
First Named Inventor	Alex S. GOLDENBERG												
Group Art Unit	2673												
Examiner Name	Unassigned												
Attorney Docket Number	IMMR-073/02US												

—	C28	Rabinowitz et al., "Multidimensional tactile displays: Identification of vibratory intensity, frequency, and contractor ure," <i>Journal of The Acoustical Society of America</i> , Vol. 82, No. 4, October 1987	
↓	C29	Bejczy et al., "Kinesthetic Coupling Between Operator and Remote Manipulator," <i>International Computer Technology Conference, The American Society of Mechanical Engineers</i> , San Francisco, CA, August 12-15, 1980	
↓	C30	Bejczy et al., "A Laboratory Breadboard System For Dual-Arm Teleoperation," <i>SOAR '89 Workshop, JSC</i> , Houston, TX, July 25-27, 1989	
↓	C31	Ohlyoung et al., "A Low-Cost Force Feedback Joystick and Its Use in PC Video Games," <i>IEEE Transactions on Consumer Electronics</i> , Vol. 41, No. 3, August 1995	
↓	C32	Marcus, "Touch Feedback in Surgery," <i>Proceedings of Virtual Reality and Medicine The Cutting Edge</i> , Sep. 8-11, 1994	
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Sheet **3** of **6**

Complete If Known

Application Number	10/671,465
Filing Date	September 29, 2003
First Named Inventor	Alex S. Goldenberg
Art Unit	2673
Examiner Name	Unassigned
Attorney Docket Number	IMMR-073/02US

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ³ (if known)			
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Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ³	Kind Code ³ (if known)			
↓		JP	H2-165278		7/19/1990	Taito Corporation	
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		WO	01/24156		4/5/2001		
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		WO	01/13354		2/22/2001		
		WO	98/32112		7/23/1998		
		WO	99/40504		12/8/1999		
	WO	02/27705		4/4/2002			

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² Applicant's unique citation designation number (optional). ³ Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

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Sheet **4**

of **6**

Complete If Known

Application Number	10/871,465
Filing Date	September 29, 2003
First Named Inventor	Alex S. Goldenberg
Art Unit	2673
Examiner Name	Unassigned
Attorney Docket Number	IMMR-07302US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
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/Seokyun Moon/

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